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ABSTRACT

Judgments that favorably set an individual apart from others tend to be made more rapidly, suggesting that the self-concept is both an effective and a cognitive entity. Subjects rated the self-applicability of traits on a 100-point scale. As in other studies using dichotomous judgements, judgement speed increased with increasing self-applicability of traits. Independently, judgements that favorably set the subject apart were made rapidly. Overall, recognition accuracy was appropriate for traits previously judged. (Author/JAC)

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Favorable Self-Referent Judgments Are Made Faster Than Non-Favorable Ones

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Previous studies of self-referent cognition have demonstrated that people process information about themselves more efficiently than other kinds of information. That is, they process self-relevant information more rapidly and retrieve it more reliably. For example, Markus (1977) showed that people make faster "me" judgments for traits that are central to one's self-schema in some particular behavioral domain than for more peripheral traits.

T. B. Rogers and Kuiper (Rogers et al., 1977; Kuiper and Rogers, 1979) have shown that people exhibit better recall and recognition memory when information has been encoded in relation to oneself than when the same information has been encoded in other ways. One interesting phenomenon in self-referent memory research is a false alarms effect reported by Rogers, Rogers, and Kuiper (1979). Subjects tended to give incorrect positive recognition judgments to highly self-descriptive adjectives that were not previously shown.

Speed of self-relevant judgments has been assumed to reflect the centrality of the judged information to one's self-concept. Important properties of the judged information have included degree of self-relevance and favorability. One aspect of self-reference that has not been investigated in the response time paradigm is McGuire's (McGuire and Padawer-Singer, 1976) notion that a self-description is important to one's self-concept only to the extent that the attribute makes the self distinctive or sets self apart from others. The present investigation provided a test of this hypothesis.

Most studies that have examined response latencies for judgments about the self have employed a binary rating task (e.g., Markus, 1977). That is,

subjects are shown a trait and asked to press either a button that is marked, "ME" or a button that is marked, "NOT ME." We used a more detailed self-applicability judgment task, using a 100-point scale. We predicted, on the basis of past research, that judgment speed would be faster with increasing self-applicability of traits. Kuiper and Rogers (reported in Kuiper and Derry, 1981) have also reported that self-referent judgment time exhibits an inverted-U relationship with degree of self-applicability. We therefore predicted that judgment speed would be faster for extreme ratings (very high and low trait self-applicability) than for moderate ratings. Finally, we hypothesized that judgments that set the subject apart from others would be made rapidly, independently of trait self-applicability.

We also collected recognition accuracy and recognition time data for the judged traits. On the basis of the Rogers, Rogers, and Kuiper false alarms effect, we predicted more false alarms with increasing self-applicability of traits.

Method

A computer was used to present stimuli and to record latency and recognition associated with self-relevant judgments. The procedure was an adaptation of the ones used by Rogers and by Markus. Stimulus materials were presented on a video display monitor, and subjects responded via a 16-key response panel. During the first phase of the experiment, 60 traits were presented in a randomized order. Each trait was accompanied by the question, "How much does this trait apply to you (0-100%)?" After the subject entered a numerical response, a second question appeared: "To what proportion of people, in general, does this trait apply (0-100%)?" For each response, judgment latency (to the start of response entry) was recorded. During the second phase of the experiment, subjects provided recognition judgments for 60 traits, including 30 of the 60 previously judged traits and 30 new (foil)

traits. The recognition judgment employed four response options that allowed subjects to indicate degrees of recognition confidence. Latency of this judgment was also recorded. For the last phase of the experiment, subjects provided self- and other-applicability judgments (as earlier) for each of the 30 (previously not judged) foil traits. All 90 traits were selected from the entire evaluative range of the 555 traits for which norms were reported by Norman Anderson in 1968. The subjects were 38 undergraduates fulfilling an Introductory Psychology course requirement.

Method of Analysis

A multiple regression methodology was employed for the data analysis. Each dependent variable of interest (for example, self-applicability judgment latency) was considered a criterion variable with predictor variables (such as self-applicability rating and the square of that rating) being entered sequentially. In this hierarchical multiple regression, partial regression weights at each step represent the degree to which variance in the criterion variable is explained by the predictor variable with the effects of all previously entered predictor variables partialed out.

Two Derived Measures

Use of the multiple regression methodology allowed the generation of two derived measures. Figure 1 illustrates an intermediate step in generating these derived measures.

Self-Distinctiveness is a regression measure of discrepancy between the self-applicability and other-applicability judgments for a given trait. For each subject, seperately, self-applicability of each trait was predicted from other-applicability of the trait using a simple linear regression. Figure 1 depicts a hypothetical regression slope. Any given point on the estimated slope represents the prediction of the trait's self-applicability from its

rated other-applicability. Observed values on the graph are represented by o's. The lines connecting the observed values to the estimated slope are residuals. A positive residual means that the rated self-applicability of a trait was greater than what was predicted given the trait's judged other-applicability. The derived measure of Self-Distinctiveness for the judgment of each trait was the square of this residual. The square of the residual was used rather than the absolute value so that more weight was placed on larger discrepancies.

Favorability of Self-Distinctiveness is a measure of the extent to which the self-applicability judgment for a given trait set the subject apart from others in a favorable direction. For each of the 90 traits the likableness value obtained from Anderson's (1968) published values was initially converted to a standard (z) score; therefore a trait below the mean of all 90 traits in likableness would have a negative z score and trait above the mean of all 90 traits would have a positive score. The derived measure was calculated by multiplying each trait's residual by the favorability z score associated with the trait. For example, in the hypothetical regression depicted in Figure 1, the self-applicability rating for the trait 'liar' is lower than what was predicted from the regression of self-applicability on other-applicability. This is seen as a negative residual. That is, the observed value fell below the estimated slope. The trait 'liar' is also associated with a negative favorability z score. When the residual and z score are multiplied, the resulting value is positive. Therefore, this particular judgment would set the subject apart from others in a favorable direction.

Results

The results can be divided into two parts: the analyses of the self- and other-applicability judgments of traits and the analyses of the recognition

data.

Trait Rating Analyses. The results for the hierarchical multiple regression analysis with self-applicability judgment latency as the criterion variable are found in Table 1. The first four variables were of procedural interest and are of little conceptual importance. The next variable entered in predicting self-judgment latency was self-applicability of traits; judgment speed increased with increasing self-applicability of traits. The sixth variable entered was self-applicability squared. This variable would indicate any U-shaped (that is, quadratic) effect of self-applicability on judgment time. The quadratic effect was significant; judgment speed was faster for traits very high or low in self-applicability than for moderately self-descriptive traits. A graphic illustration of the linear and quadratic effects can be seen in Figure 2. The next variable was Self-Distinctiveness which was found to be a significant predictor of self-applicability judgment time; judgment speed was faster for judgments that set the subject apart from others. The final variable was Favorability of Self-Distinctiveness, which was also significant in predicting self-applicability judgment latency; judgment speed was faster for judgments that set the subject apart from others in favorable direction.

Recognition Analyses. The hierarchical multiple regression analysis of the recognition accuracy data was divided into two parts: the analysis of previously judged traits and the analysis of non-previously judged (foil) traits. The criterion variable of recognition accuracy was scored so that higher numbers indicate confident, accurate judgments. The results for this analysis can be found in Table 2. As before, the first several variables are of only procedural interest. The first variable of conceptual importance was self-applicability of traits, and was entered as the sixth variable for

previously judged traits and as the third variable for the foil traits. There was no effect of self-applicability on recognition accuracy for previously judged traits, but there was an effect for the foil traits; more false alarms occured with increasing self-applicability of traits. This is the same kind of false alarms effect reported by Rogers, Rogers, and Kuiper (1979). The next entered variable was self-applicability squared which was similarly not significant for previously judged traits but was significant for foil traits; more false alarms occured for traits very high or low in self-applicability than for moderately self-descriptive traits. Self-Distinctiveness of judgments was entered after self-applicability and had a non-significant effect for both previously judged traits and for foil traits on recognition accuracy. The last entered variable was Favorability of Self-Distinctiveness. This variable had a non-significant effect for previously judged traits, but a significant effect for foil traits on recogntion accuracy; more false alarms occured the more judgments for self set the subject apart from others in a favorable direction.

Discussion

Overall, recognition accuracy was quite good for traits that had been previously judged, with no recognition superiority for traits greater in self-applicability. We also observed the kind of false alarms effect reported by Rogers, Rogers, and Kuiper. Subjects tended to give incorrect positive recognition judgments to highly self-descriptive traits that were not previously shown. Subjects also tended to give more false alarms for traits on the self-applicability extremes and for traits that set the subject apart from others in a favorable direction. This provides evidence that the false alarms effect may be due to the to-be-recognized trait's centrality to one's self-concept.

Use of the 100-point rating scale allowed demonstration of a linear as

well as a curvilinear effect of self-applicability on judgment time. The regression-derived measures further allowed demonstration of faster response time for judgments that set the subject apart from others in a favorable direction. The reasonable assumption that speed of self-relevant judgments reflects the centrality of the judged information to one's self-concept permits us to draw an interesting inference about the composition of the self-concept. It does not give equal weight to all information about one-self. Information about distinctive qualities is most central if that information has favorable evaluative implications. The self-concept is an affective, in addition to cognitive, entity.

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Table 1

Hierarchical Multiple Regression Analysis
Self-Judgment Latency as Criterion

Source	Step	df	F	Slope
Subjects	1	37/3382	17.37**	—
Position in Sequence	2	1/3381	363.22**	-.469
When (Before vs. After Recognition)	3	1/3380	4.45*	—
Pos. Seq. X When	4	1/3379	0.01	—
Self-Applicability	5	1/3378	7.60*	-.057
$(\text{Self-Appl.})^2$	6	1/3377	113.14**	-.0088
Self-Dist'ness	6	1/3377	19.91**	-.003
Favorability of Self-Dist'ness	7	1/3376	6.21*	-.080

NOTES: * $p < .05$; ** $p < .01$; The last two variables entered without self-applicability squared in the model.

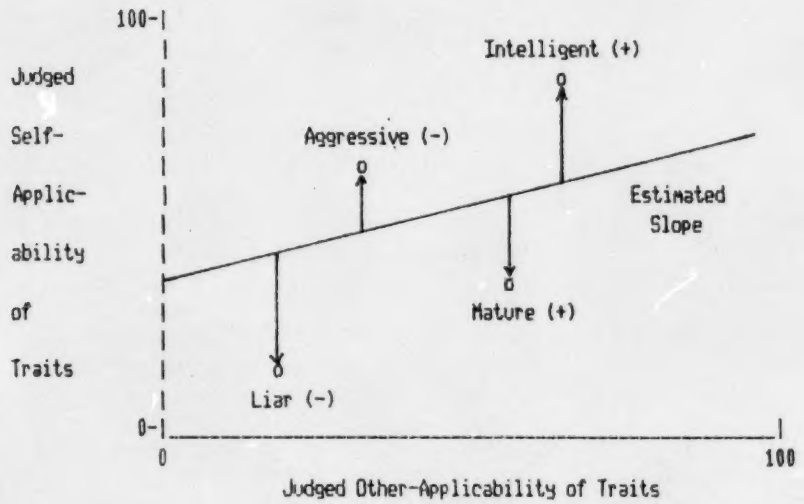

Figure 1. Illustrative regression of judged self-applicability on judged other-applicability of traits. o's represent observed scores. Lines connecting o's with estimated slope are residuals. +'s and -'s in parentheses indicate sign of normative favorability of each trait, as determined from Anderson (1968).

Table 2

Hierarchical Multiple Regression Analysis
Recognition Accuracy as Criterion

	Actually Seen Traits				Never-seen (Foil) Traits			
Source	Step	df	F	Slope	Step	df	F	Slope
Subjects	1	37/1102	2.31*	—	1	37/1102	3.57*	—
Sequence Pos. of Orig. Trait (APOS)	2	1/1101	11.00*	.0035	-			
Position in Recognition Seq. (BPOS)	3	1/1100	3.90*	-.002	2	1/1101	0.02	—
(Seq. Pos.)^2	4	1/1099	2.00	—	-			
APOS X BPOS	5	1/1098	1.14	—	-			
Self-Applicability	6	1/1097	1.71	—	3	1/1100	46.50**	-.005
(Self-Appl.)^2	7	1/1096	0.22	—	4	1/1099	21.01**	-.00014
Self-Dist'ness	7	1/1096	1.55	—	4	1/1099	3.77	-.00005
Favorability of Self-Dist'ness	8	1/1095	1.21	—	5	1/1098	49.60**	-.008

NOTES: * $p < .05$; ** $p < .01$; The last two variables entered without self-applicability squared in the model.

PLOT ILLUSTRATES LINEAR AND QUADRATIC
EFFECTS OF SELF-APPLICABILITY
ON JUDGMENT TIME

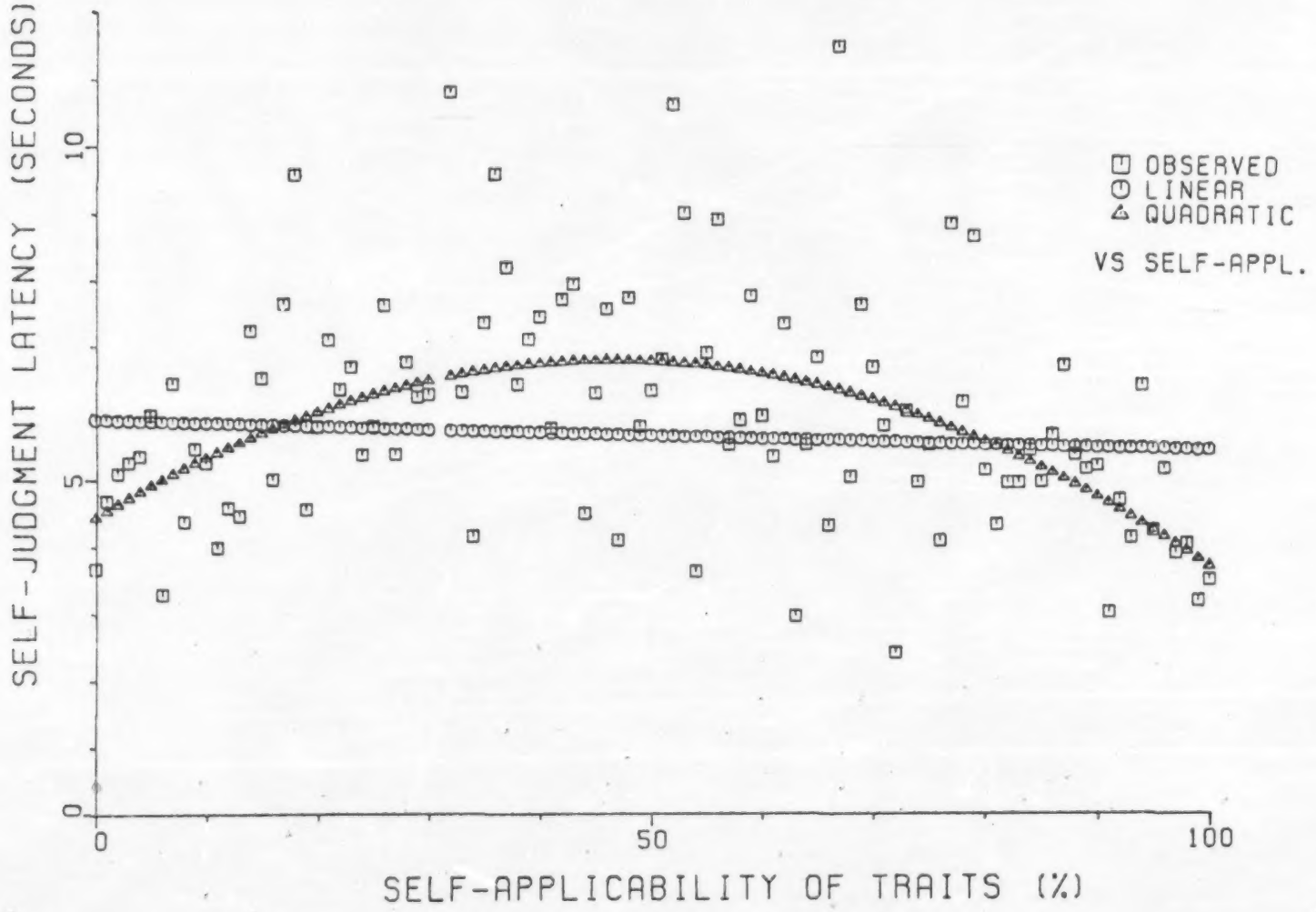

Figure 2